MASLENNIKOVA, M.G.; GUZMAN, M.A.,red.izd-va; EL'KINA, E.M.,tekhn.red.

[Lightweight heat resistant concretes made with soluble
glass and portland cements] Legkie zharoupornye betony na
zhidkom stekle i na portlandtsemente. Moskva, Gos.izd-vo
lit-ry po stroit.arkhit. i stroit. materialam. 1958. 58 p.
(Akademiia stroitel'stva i arkhitektury SSSR. Institut betona
i zhelezobetona. Perovo. Nauchnoe soobshchenie, no.4)

(MIRA 12:4)

(Lightweight concrete)

NEKRASOV, K.D., prof.,doktor tekhn.nauk; MASLENNIKOVA, M.G., inzh.

Heat-resistant lightweight concretes. Bet. i zhel.-bet. no.2:63-67
F '61.                                              (MIRA 14:2)
            (Lightweight concrete)

NEKRASOV, K.D., prof., doktor tekhn.nauk; MASLENNIKOVA, M.G., insh.

Heat-resistant perlite concrete.  Bet. i zhel.-bet. 8
no.8:339-342  Ag '62.                              (MIRA 15:9)
                        (Perlite)
                 (Lightweight concrete)

NEKRASOV, K.D., prof., doktor tekhn.nauk; MASLENNIKOVA, M.G., kand.tekhn.nauk

Structural heat resistant keramzit concrete on a soluble glass base.
Bet.i zhel.-bet. 9 no.12:529-532 D '63.                    (MIRA 17:2)

FLEROV, B.K.; MASLENNIKOVA, M.S.; SUROVTSEVA, A.D.

Methods for determining the resistance of nonmetallic materials
to the destructive action of fungi. Mikrobiologiia 32 no.3:
551-557 My-Je'63                                (MIRA 17:3)

MASLENNIKOVA, N.K., Cand Med Sci -- (diss) "Electrophoretic detection of protein fraction in blood serum in patients with different forms of tuberculosis." Khar'kov, 1959, 15 pp (Khar'kov State Med Inst) 200 copies (KL, 34-59,118)

VIL'NYANSKIY, L. I., doktor med. nauk; MASLENNIKOVA, N. K., kand. med.
nauk (Khar'kov)

Use of sulfanilamide substitutes for insulin in diabetes mellitus
complicated by pulmonary tuberculosis. Klin. med. 40 no.7:74-78
Jl '62.                                    (MIRA 15:7)

1. Is Ukrainskogo nauchno-issledovatel'skogo instituta tuberku-
leza.

        (SULFANILAMIDES)   (DIABETES)   (TUBERCULOSIS)

YAKUBOVICH, S.V.; RIVLINA, Yu.L.; MASLENNIKOVA, N.L.

    Aging of paint and lacquer coatings (brief survey of the literature).
    Lakokras.mat. i ikh prim. no.1:88-95 '60.        (MIRA 14:4)
        (Paint materials)        (Protective coatings)

YAKUBOVICH, S.V.; RIVLINA, Yu.L.; MASLENNIKOVA, N.L.

Study of the mechanical properties and stability of protective
coatings in the process of aging. Lakokras.mat.i ikh prim. no.3:
19-22 '60. (MIRA 14:4)
(Protective coatings—Testing)

S/081/62/000/016/037/043
B171/B186

AUTHORS:      Yakubovich, S. V., Maslennikova, N. L.

TITLE:        Investigation of the internal stresses arising in coats of
              paint during the process of aging

PERIODICAL:   Referativnyy zhurnal. Khimiya, no. 16, 1962, 549, abstract
              16P281 (Lakokrasochn. materialy i ikh primeneniye, no. 5,
              1961, 27 - 30)

TEXT:  It has been established that an optical method can be used for
determining the changes in stress values that arise in coats of paint
during the process of aging. The films of these systems investigated
which are based on alkyd and alkyd-melamine resins, as well as of those
based on nitrocellulose (composition used for motor car finishing enamels
with addition of convenient plasticizers) are distinguished by their low
internal stress values. It has been shown that in the formation of paint
coating films the internal stresses depend on the temperature of formation
and on the length of exposure to its action. The higher the curing temper-
ature and the longer it is maintained, the higher are the internal stresses.

Card 1/2

Investigation of the internal...

S/081/62/000/016/037/043
B171/B186

The greatest changes in the film properties, particularly the changes in the internal stress values, occur at the initial stage of the aging process. Subsequently, the internal stresses remain unchanged or show some decrease, owing to relaxation. Under normal working conditions, the paint coatings are subject to only comparatively low internal stresses. [Abstracter's note: Complete translation]

Card 2/2

S/276/63/000/002/026/052
A052/A126

AUTHORS:        Yakubovich, S. V., and Maslennikova, N. L.

TITLE:          Investigation of adhesion of paint coatings under conditions
                of ageing

PERIODICAL:     Referativnyy zhurnal, Tekhnologiya mashinostroyeniya, no. 2,
                1963, 103, abstract 2B548 (Lakokrasochn. materialy i ikh
                primeneniye, no. 4, 1962, 20-25)

TEXT:          The results of investigations of adhesion of paint coatings
after their formation and in the process of ageing are discussed as well
as the interconnections between the adhesion and internal stresses in paint
films. Alkyd and alkyd-melamine resin-based paint materials, ФК - 42в(FK-
42v) alkyd resin-based varnish, K-421-02 (K-421-02) butanolized melamine-
formaldehyde resin-based varnish and varnish no.136 were tested. It is
shown that FK-42v alkyd resin-based coatings have a higher adhesion to the
base than alkyd-melamine resin-based coatings; the change of adhesion of
coatings with the increase of temperature and solidification time is ex-
plained by the increase of the number of cross bridges in polymeric film
generatrices which leads to an increase of internal stresses in the coating

Card 1/2

Investigation of adhesion...                    S/276/63/000/002/026/052
                                                A052/A126

In the process of thermo-oxidizing and photochemical ageing of coatings
their adhesion decreases at first owing to the increase of internal stres-
ses, and afterwards changes inconsiderably since internal stresses de-
crease a little due to relaxation. It is assumed that alkyd and alkyd-
melamine resin-based coatings are applied at adhesion values lower than
the initial ones, but higher than the internal stress values. Good ser-
vice properties of alkyd-melamine coatings (in spite of a low plasticity)
are explained by the fact that they have a sufficient adhesion and medium
internal stresses. The method of a gradual scaling of the base (foil)
from the coating can be used for a comparative qualitative characteristic
of adhesion of paint coatings.

(Abstracter's note: Complete translation.)

Card 2/2

YAKUBOVICH, S.V.; MASLENNIKOVA, N.L.; Prinimali uchastiye: ZAYTSEVA,
        L.V.; KRUCHININA, G.I.

        Investigating the adhesion of paint coatings under aging con-
        ditions. Lakokras.mat. i ikh prim. no.4:20-25  '62. (MIRA 16:11)

SANZHAROVSKIY, A.T.; MASLENNIKOVA, N.L.; YAKUBOVICH, S.V.

Using the optical and console methods for investigating the
inner stresses of polymer coatings. Lakokras.mat.i ikh prim.
no.5:30-37  '62.                                    (MIRA 16:1)
                (Polymers)  (Strains and stresses)
                (Protective coatings—Testing)

MASLENNIKOVA, N.L.; YAKUBOVICH, S.V.; SANZHAROVSKIY, A.T.; RIVLINA, Yu.L.;
Prinimali uchastiye: EMMANUILOV, Yu.M.; KRUCHININA, G.I.;
ZAYTSEVA, L.V.

Internal stresses developed in the process of formation
and aging of nitrocellulose coatings. Lakokras.mat.i ikh prim.
no.1:15-18  '63.                                      (MIRA 16:2)
                        (Paint materials)
                        (Strains and stresses)

L 13491-66    EWT(m)/EWP(j)/T    RM

ACC NR:    AP6001682

SOURCE CODE:   UR/0303/65/000/006/0034/0039

AUTHORS:  Maslennikova, N. L.; Sanzharovskiy, A. T.; Yakubovich, S. V.

ORG:  none

TITLE:  Changes of mechanical properties and internal stresses of perchlorovinyl resin coating during the process of atmospheric aging

SOURCE:  Lakokrasochnyye materialy i ikh primeneniye, no. 6, 1965, 34-39

TOPIC TAGS:  plastic coating, pigment, plasticizer, tensile stress

ABSTRACT:  Changes in relative elongation, tenacity, and internal stresses occurring during aging of perchlorovinyl (I) coating which contains various plasticizers and pigments were investigated at the atmospheric station GIPI-4 in Moscow during April-November.  It was found that introduction of 0.46 parts (by wt.) of alkyd resin (II) lowers by 2 to 3 times the elastic modulus, tenacity, and internal stress, while increasing rupture elongation.  Introduction of 0.3 parts (by wt.) of chlorinated biphenyl (III) results in an even stronger plasticizing effect than addition of II. The combined effect of adding II and III is cumulative.  Addition of pigments (TiO₂, ZnO, gas black) causes an increase in tenacity, in elastic modulus, and in internal stress, but produces a marked decrease in rupture elongation.  The general conclusion was reached that spontaneous destruction of polymeric coatings occurs when internal stresses become equal to long-term tenacity.  For rigid coatings,

Card 1/2

UDC:  667.613.2:620.193.2

L 13491-66

ACC NR: AP6001682

internal stresses correspond to ∿ half of the short-term tenacity, for elastic coatings, to 10--15%. G. I. Kruchinina participated in this work. Orig. art. has: 3 tables, 9 figures, and 1 formula.

SUB CODE: 07/ SUBM DATE: none/ ORIG REF: 006

Card 2/2

L 03032-67    EWP(j)/EWP(k)/EWT(m)/T/EWP(e)/EWP(t)/ETI    IJP(c)    RM/JD/HW

ACC NR: AP6023067    (A)                SOURCE CODE:  UR/0191/66/000/004/0043/0046

AUTHOR:  Gul', V. Ye.;  Shenfil', L. Z.;  Mel'nikova, G. K.;  Maslennikova, N. L.

ORG:  none

TITLE:  Temperature dependence of electrical conductivity of films prepared from epoxy resin with metallic fillers

SOURCE:  Plasticheskiye massy, no. 4, 1966, 43-46

TOPIC TAGS:  electric conductance, electric property, epoxy plastic, filler, nickel, silver

ABSTRACT:  The authors studied the specific volume resistivity ($\rho_v$) of highly conducting epoxy films filled with dispersed metallic powders in relation to temperature. The experiments were made on ED-5 epoxy resin samples, filled with 37 volume % Ni or 20.5 volume % molecular Ag, and hardened by diethylenetriamine for 5 hr. at 70C. In Ni-filled samples, the thermal expansion of the polymer and its electrical conductivity decreased linearly with increasing temperature, up to the temperature of the glass (85-90C). Above it, inflections occurred on the curves, which were more pronounced the higher the concentration of diethylenetriamine. After heating, the specific volume resistivity of the Ni-containing samples increased. The relative volume resistivity was higher for the samples containing smaller concentrations of diethylenetriamine.

                            UDC:  678.643'42'5+678.046.32.01 : 537.311

Card   1/2

L 03032-67

ACC NR:   AP6023067                                                          ○

In contrast to the heating curves, the cooling curves of log $P_t/P_o$ vs temperature
(where $P_t$ and $P_o$ are $\rho$ at a temperature and at $0^oC$, respectively) did not have inflec-
tion points. Up to the transition temperature of the glass the thermal coefficient of
the resistivity of the samples containing molecular Ag was positive and above this
temperature it became negative. After a thermal treatment, the $P_t/P_o$ ratio was smaller
in all Ag-filled samples. The difference in the electric behavior of epoxy resins fill-
ed with Ni or Ag is explained by a difference in bonds present in these resins. The
first has stronger metal-polymer and the second has stronger metal-metal bonds. The
lower stability of Ni also adds to the difference in these properties. Orig. art. has:
4 fig.

SUB CODE:  20,11/  SUBM DATE:  none/  ORIG REF:  016/  OTH REF:  002

Card   2/2

USSR / Microbiology.  Symbiosis.                                    F

Abs Jour    : Ref. Zhur - Biol., No. 21, 1958, No 95078

Author      : Maslennikova, N. M.
Inst        : Moscow Agricultural Academy imeni K. A. Timiryazev
Title       : Physiological Features of Bacteria Which Were
              Isolated from the Gastro-Intestinal Tract of Cows
              and Which Synthesize Proteic Substances of a
              Special Body by Means of Protozoan Forms of
              Bonded Nitrogen

Orig Pub    : Dokl. Mosk. s.-kh. akad. im K. A. Timiryazeva,
              1957, vyp. 30, ch.2, 82-90.


Abstract    : Bacteria and yeast systematic position not es-
              tablished isolated from the gastro-intestinal
              tract of cows promote the use of urea as a source
              of nitrogen, as well as mineral forms of nitrogen,
              and as a source of carbon - glucose, acetate,

Card 1/2

MASLENIKOVA, N.N., Cand Bio Sci--(diss) "Physiological *peculiarities* ~~characte-~~ ~~ristics~~ of ~~the~~ bacteria ~~which are~~ encountered in the gastro-intes-

tinal tract of cattle and which synthetize protein substances *from* ~~the~~

~~expense of~~ the simplest forms of bound N." *(nitrogen)* Mos,1958.  17 pp

(Mos Order of Lenin Agr ~~Inst~~ Acad im K.A. Timiryazev), 110 copies

(KL,22-58,106)

-60-

FEDOROV, M.V., doktor biologicheskikh nauk, prof.; MASLENNIKOVA, N.M.,
kand.biologicheskikh nauk

Rate of the synthesis of cellular substance and protein by
ruminants' gastro-intestinal micro-organisms able to utilize
simple sources of carbon and nitrogen. Izv. TSKhA no.3:40-
48 '60.                                                    (MIRA 14:4)
                    (INTESTINES—MICRO-ORGANISMS)
                         (RUMINANTIA)

FEDOROV, M.V.; MASLENNIKOVA, N.M.

Activity of respiratory enzymes and productivity of protein synthesis
in certain amino-autotrophic bacteria.  Mikrobiologiia 29 no.3:315-
319 My-Je '60.                                    (MIRA 13:7)

1. Moskovskaya sel'skokhozyaystvennaya akademiya im. K.A.Timiryzeva.
        (PROTEINS)           (OXIDATION, PHYSIOLOGICAL)
        (RUMINANTIA)        (ALIMENTARY CANAL—BACTERIOLOGY)

*HIHSLENNIKOUH, II. S*

Category : USSR/Photoeffect - Electron and Ion Emission                    H-2

Abs Jour : Ref Zhur - Fizika, No 1, 1957, No 1656

Author   : Shalabutov, Yu.K., Maslennikova, N.S.
Title    : Energy Distribution of Photoelectrons in the External Photoeffect of
           Antimony-Caesium Cathodes.

Orig Pub : Zh. tekhn. fiziki, 1956, 26, No 6, 1166-1169

Abstract : The spherical-capacitor method was used to investigate the energy dis-
           tribution of photoelectrons from an antimony-caesium photocathode at
           293 and 90° K.  The purpose of the measurement was to establish the pre-
           sence (or absence) in the distribution of a group of slow electrons for
           $\lambda \sim 525$ -- 575 millimicrons.  The existence of this group is expected from
           the concepts of the exciton mechanism of photoelectron excitation.  The
           authors have established the presence of a group of slow (approximately 0.2
           ev) electrons on the distribution curve for $\lambda = 530$ millimicrons.  The
           authors indicate that this result can be considered as a consequence of the
           effect of the exciton mechanism.  Bibliography, 5 titles.

Card     : 1/1

MASLENNIKOVA, N. F.

USSR/Chemical Technology - Chemical Products and Their Application.  Treatment of
Solid Mineral Fuels, I-12

Abst Journal:  Referat Zhur - Khimiya, No 19, 1956, 62543

Author:  Dodonov, Ya. Ya., Lebedev, M. N., Maslennikova, N. P.

Institution:  None

Title:  Investigation of Gasification Tar of Savel'yevsk Shale

Original
Periodical:  Nauch. yezhegodnik za 1954 g., Saratovsk. un-t, Saratov, 1955,
483-484

Abstract:  Acid portion recovered from tar produced by gasification of Savel'yevsk
shale in an industrial gas generator with steam oxygen blowing, by
treatment with petroleum ether was divided into phenols and asphal-
tenes.  Narrow phenol fractions were identified by condensation of
Na-phenolates with monochloracetic acid and from the composition of
phenoxyacetic acid and its melting point the corresponding phenols
were determined.  In the phenolic portion of the 165-190° fraction
was ascertained the presence of p- and m-cresol and 2,3-methoxyphenols
and in the 190-270° fraction were found 2,3,4-methoxyphenols.

Card 1/1

MASLENNIKOVA, N. P.

USSR /Chemical Technology. Chemical Products          I-15
    and Their Application

    Treatment of solid mineral fuels

Abs Jour:  Referat Zhur - Khimiya, No 9, 1957, 31844

Author  :  Dodonov Ya. Ya., Lebedev M.N., Maslennikova N.P.

Title   :  Investigation of the Tar of Gasification of
           Savel'yevskiy Shale

Orig Pub:  Sb.: Goryuchiye slantsy. Khimiya i tekhnologiya,
           No 2. Tallin, Est. gos. izd-vo, 1956, 125-129

Abstract:  See also RZhKhim, 1956, 62543

Card 1/1

5.3610

AUTHORS:    Ponomarev, A. A., Maslennikova, N. P., Alakina, N. V., Krivenko, A.P.

TITLE:      Synthesis and Some Catalytic Transformations of Primary Furan Amines

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 131, No. 6, pp. 1355 - 1358

TEXT:  The authors thoroughly studied one of the ways of synthesizing primary furan amines: the reductive amination of saturated and unsaturated aldehydes and ketones in the presence of ammonia. They succeeded in establishing that the following is achieved by hydrogenation under pressure in ammoniacal-alcoholic solution in the presence of Raney nickel: not only $\alpha$-$\beta$-mono-unsaturated furan ketones but also diene ketones can be easily transformed into corresponding primary furan amines (yields up to 66%, and 84%, respectively, of the theoretical yields). Also saturated furan ketones (acetyl furan) with a carbonyl group in position 1 on the furan ring are smoothly transformed into primary furan amines. No hydrogenation of the furan ring occurs. This showed the general character of this reaction leading to primary amines with a position of the amino group 1, 3, and 5 in the side chain in good yields (see Scheme). Table 1 shows the most important properties and analyses of the amines produced. It also lists some physical constants of the

Card 1/3

80091

Synthesis and Some Catalytic Transformations of     S/020/60/131/06/35/071
Primary Furan Amines                                B011/B005

N-acetyl derivatives of these amines. These derivatives are easily formed from
the amines under action of acetic anhydride (yields up to 94%). Table 2 shows
properties of tetrahydrofuran amines and their N-acetyl derivatives. They are
formed from the N-acetyl derivatives of furan amines by hydrogenation in di-
oxane, and can be saponified. The presence of the furan-, or tetrahydrofuran
ring, respectively, and of the amino group was confirmed by UV and IR spectra
recorded by A. D. Peshekhonova. Furan- and tetrahydrofuran amines were further
used by the authors for synthesizing pyrrolysidine- and dihydrodipyrrol deriva-
tives. These nitrogen heterocycles are contained in many alkaloids. The follow-
ing substances were used for these experiments of intramolecular cyclization:
1-(α-furyl)-3-aminopropane, 1-(α-furyl)-3-aminobutane, 2-furfurylaminocyclo-
hexane, and 1-(α-tetrahydrofuryl)-2-aminobutane. Pure aluminum oxide, and an
aluminum oxide activated with thorium dioxide (formula and preparation by
Yu. K. Yur'yev), were used as catalysts. Cyclization proceeded according to the
scheme indicated. The yields in dihydrodipyrrols attained 32%, those in pyrroly-
sidine 50% of the theoretical yields (Table 3). The investigations are being
continued. There are 3 tables and 3 references.


Card 2/3

80091

Synthesis and Some Catalytic Transformations of      S/020/60/131/06/35/071
Primary Furan Amines                                  B011/B005

ASSOCIATION:  Saratovskiy gosudarstvennyy universitet im. N. G. Chernyshevskogo. .4
              (Saratov State University imeni N. G. Chernyshevskiy)

PRESENTED:    December 29, 1959, by A. A. Balandin, Academician

SUBMITTED:    December 25, 1959

Card 3/3

LEBEDEV, M.N.; MASLENNIKOVA, N.P.

    Study of phenols in Savelyevka shale oils. Uch.zap. SGU 75:19-20 '62.        (MIRA 17:3)
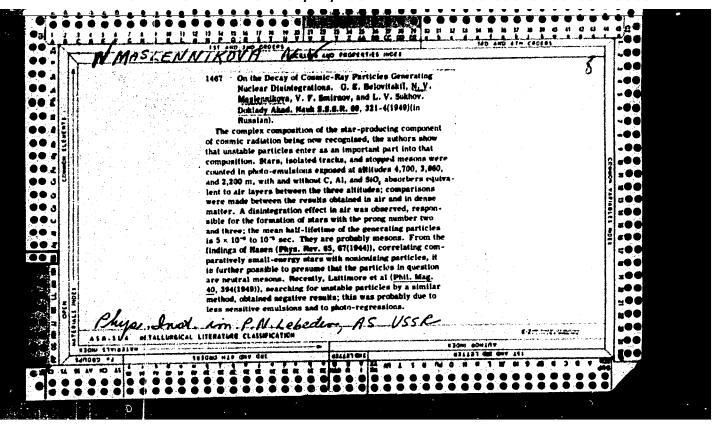
PONOMAREV, A.A.; SKVORTSOV, I.M.; MASLENNIKOVA, M.P.

Furar compounds. Part 21: Synthesis of some diamines of the furan
and tetrahydrofuran series. Zhur.ob.khim. 33 no.4:1130-1135 Ap '63.
(MIRA 16:5)

1. Saratovskiy gosudarstvennyy universitet imeni N.G.Chernyshevakogo.
    (Amines)                        (Furan)

N MASLENNIKOVA

1467    On the Decay of Cosmic-Ray Particles Generating
Nuclear Disintegrations.  O. E. Belovitskii, N. Y.
Maslennikova, V. F. Smirnov, and L. V. Sukhov.
Doklady Akad. Nauk S.S.S.R. 69, 321-4(1949)(in
Russian).

The complex composition of the star-producing component
of cosmic radiation being now recognised, the authors show
that unstable particles enter as an important part into that
composition. Stars, isolated tracks, and stopped mesons were
counted in photo-emulsions exposed at altitudes 4,700, 3,860,
and 2,200 m, with and without C, Al, and SiO₂ absorbers equiva-
lent to air layers between the three altitudes; comparisons
were made between the results obtained in air and in dense
matter. A disintegration effect in air was observed, respon-
sible for the formation of stars with the prong number two
and three; the mean half-lifetime of the generating particles
is $5 \times 10^{-9}$ to $10^{-7}$ sec. They are probably mesons. From the
findings of Nasen (Phys. Rev. 65, 67(1944)), correlating com-
paratively small-energy stars with nonionising particles, it
is further possible to presume that the particles in question
are neutral mesons. Recently, Lattimore et al (Phil. Mag.
40, 394(1949)), searching for unstable particles by a similar
method, obtained negative results; this was probably due to
less sensitive emulsions and to photo-regressions.

Phys. Inst. im P. N. Lebedev, AS USSR

A S A. S U A    METALLURGICAL LITERATURE CLASSIFICATION

*M ASLE NN I KOVA, N.V.*

BOGOMOLOV, K.S.; MASLENNIKOVA, N.V.; RAZORENOVA, I.F.; ANOSOVA, N.V.;
ZHARKOV, V.N.

Determining the energy loss caused by ionizing radiation during the
formation of silver of the latent image.  Zhur.nauch.i prikl.fot.i
kin. 2 no.6:408-412 N-D '57.                           (MIRA 10:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy kino-fotoinstitut.
              (Photography--Developing and developers)

VIDRO, G.I.; MASLENNIKOVA, N.V.

Spectral method of studying the migration of impurities in the oxide
cathode of electron tubes. Zav.lab. 29 no.12:1443-1445  '63.
(MIRA 17:1)

PONOMAREV, A.A.; MASLENNIKOVA, P.P.; KRIVEN'KO, A.P.

Furan compounds. Part 15: Reductive amination of saturated and
unsaturated furan ketones. Zhur. ob. khim. 31 no.3:958-964 Mr '61.
(MIRA 14:3)

1. Saratovskiy gosudarstvennyy universitet.
         (Amination) (Ketones)

USSR / Farm Animals, Domestic Fowl                              Q-7

Abs Jour: Ref Zhur-Biol., No 2, 1958, 7248

Author   : R. K. Maslennikova, T. K. Glagoleva
Inst     : Stavropol Agricultural Institute
Title    : On the Question of the Loss of Weight in
           Chicken Eggs in the Incubator of the "Records-
           39" Type

Orig Pub: Sb. n-i. rabot stud. Stavropol'sk. s-kh. in-t.
          1956, vyp. 4, 150-151

Abstract: The average loss in weight of a chicken egg
          during the entire period of its incubation in
          the incubator of the Record-39 type has been
          determined (9.5 to 10.9 percent). Various
          degrees of "shrinkage" have been observed in
          eggs varying in weight. The greatest loss in
          weight has been observed in small eggs, and the

C    Card 1/2

30

KLYUCHIKOV, V.N., dotsent; MASLENNIKOVA, R.V.

Changes in the nervous system in periarteritis nodosa (Kussmaul-Maier disease). Sov.med. 23 no.6:21-25 Je '59.
(MIRA 12:9)

1. Iz kafedry nervnykh bolezney (zav. - dotsent V.N.Klyuchikov) Yaroslavskogo meditsinskogo instituta (dir. - prof.N.Ye.Yarygin) na baze nervnogo otdeleniya Yaroslavskoy oblastnoy klinicheskoy bol'nitsy (glavnyy vrach Z.M.Denisenko).
(PERIARTHRITIS NODOSA pathol.)
(NERVOUS SYSTEM pathol.)

MASLENNIKOVA, S. I.

1515

Issledovaniye nasosadozatora dlya privoda podach stankov. M. 1954 12 s. 20 sm (M-vo vyssh. obrazovaniya SSSR. Mosk. stankoinstrym. in-t im. I. V. STALINA ( 100 ekz B ts. (54- 55077)

SO: Knizhaya Letopis', Vol. 1, 1955

MASLEHNIKOVA, S. I.

"The Investigation of a Proportioning Pump for the Feed Drive of a Lathe."  Cand Tech Sci, Moscow Machine Tool and Tool Inst imeni I. V. Stalin, 5 Jan 55.   (VM, 24 Dec 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)

SO:  SUM No. 556, 24 Jun 55

MASLENNIKOVA, T.F., kand. tekhn. nauk; MINKIN, A.S., kand. tekhn. nauk

         Qualifications of young technicians. Shvein. prom. no.4:24-27
         Jl-Ag '59.                         (MIRA 13:2)

         1.Leningradskiy tekhnikum legkoy promyshlennosti.
                      (Technical education) (Clothing industry)

MASLENNIKOVA T. I.

Lechenie paraaminosalitsilovoi kislotoi kostnosustavnogo tuber-
kuleza.  /Para-aminosalicylic acid therapy of osteo-articular
tuberculosis/  Sovet. med.  No. 6  June 51  p. 25-6.

1. Moscow
   CIML  Vol. 20,  No. 10  Oct 1951

MASLENNIKOVA, T. I.

IKONNIKOV, S.S.; ISMAILOV, M.; KNORRING, I.G.; KOROLEVA, A.S.; KUDRYASHEV,
    S.N.; MALEYEV, V.P.; MASLENNIKOVA, T.I.; NEVSKIY, S.A.; NIKITIN,V.A.;
    OVCHINNIKOV, P.N.; PLESHKO, S.I.; POPOV, N.G.; SIDORENKO, G.T.;
    CHUKAVINA, A.P.; SHIBKOVA, I.F.; BORISOVA, A.G., redaktor; VASIL'CHEN-
    KO, I.T., redaktor; NEUSTRUYEVA, O.E., redaktor; ZENDEL', R.Ye.,
    tekhnicheskiy redaktor

[Flora of the Tajik S.S.R.] Flora Tadzhikskoi SSR. Moskva, Izd-vo
Akad.nauk SSSR. Vol.1. [Pteridophyta - Gramineae] Paporotnikoobrasnye-
slaki.  Glav.red. P.N.Ovchinnikov.  1957. 547 p.          (MIRA 10:9)
        (Tajikistan--Botany)

MASLENNIKOVA, T.K.

Offshore measurement of waves. Trudy Inst. okean. 35:118-120
'59.                                              (MIRA 13:3)
                    (Waves)

MASLENNIKOVA, T.K.

Some specimens of foreign oceanographic instruments. Biul. Okean.
kom. no.4:47-52 '60.             (MIRA 13:7)
           (Oceanographic instruments)

MASLENNIKOVA, T.N.; SOLOV'YEV, D.T.

Some data on the effect of sodium bisulfite on the wettening
of corn kernels. Trudy TSNIIKPP no.6:92-99  '63.    (MIRA 16:12)

MASLENNIKOVA, T. V.

Scientifically-based atheistic education of students during botnay
classes. Biol. v shkole no.5:23-29 S-O '58.    (MIRA 11:11)

1. Orlovskiy pedagogicheskiy institut.
   (Bontany—Study and teaching)      (Atheism)

SHASHKOV, V.S.; ANTIPOV, V.V.; RAUSHENBAKH, M.O.; CHERNOV, G.A.;
        MASLENNIKOVA, V.A.

    Effect of space flight factors on the level of serotonin in the
    blood of animals.  Probl.kosm.biol. 1:258-264 '62. (MIRA 15:12)
                (SPACE FLIGHT--PHYSIOLOGICAL EFFECT)
                        (SEROTONIN)

MASLENNIKOVA, V.A., Cand Biol Sci -- "Conditions determining the synchronism

of seasonal cycles of parasitic insects and their hosts." Len, 1960  (Zoological

Inst, Acad Sci USSR.  Academic Council).  (KL, 1-61, 188)

-129-

MASLENNIKOVA, V.A.

Hibernation and diapause in the development of Trichogramma
evanescens Westw. .  Vest.LGU ,14  no.3:91-96  '59.
(MIRA 12:5)

(CHALCID FLIES) (COLD--PHYSIOLOGICAL EFFECT) (INSECTS--DEVELOPMENT)

MASLENNIKOVA, V.A.

Correlation of seasonal cycles in geographical populations of
Apanteles glomeratus L. and its host Pieris brassicae L.
Ent. oboz. 38 no.3:517-522 '59.                    (MIRA 13:1)

1.Kafedra entomologii Leningradskogo gosudarstvennogo universiteta,
Leningrad.
          (Ichneumon flies) (Parasites--Butterflies)
          (Photoperiodism)

MASLENNIKOVA, V.A.

Effect of host hormones on the diapause in Pteromalus puparum L.
(Hymenoptera, Chalcidoidea).  Dokl. AN SSSR 139 no.1:249-251
Jl '61.                                              (MIRA 14:7)

1.  Leningradskiy gosudarstvennyy universitet im. A.A. Zhdanova.
Predstavleno akademikom I.I. Shmal'gauzenom.
      (Diapause)  (Chalcid flies)  (Hormones)

MASLENNIKOVA, V. A.

"Study of the Colchicine Containing Plants of Central Asia,"  Dok. AN, 63, No. 4,
1948.  Mbr., Central Asia State Univ., Tashkent; -c1948-.

CA MASLENNIKOVA, V.A.

/0

**Syntheses from cotarnine.** V. A. Maslennikova and G. V. Lazur'evskiĭ (Mid-Asiatic State Univ., Alma Ata). *Doklady Akad. Nauk S.S.S.R.* 72, 305-6(1950).—Heating cotarnine (I) with an equimolar amt. of $CH_2(CO_2H)_2$ in pyridine yielded *2-methoxy-3,4-methylenedioxy-6-(2-methylaminoethyl)cinnamic acid*, whose *HCl* salt decomp. 202-3°; *Et ester*, b. 170-2°. Stirring I with $CO(CH_2CO_2H)_2$ yielded $CO(CH:CHR)_2$ [R = 2-methoxy-6-(2-methylaminoethyl)-3,4-methylenedioxyphenyl], m. 83°. $AcCH_2CO_2H$ similarly gave RCH:CHAc (III), m. 156°, which is apparently the structure of the reaction product of I with $Me_2CO$ (cf. Liebermann and Kropf, *Ber.* 37, 211(1904); Dey and Kantam, *C.A.* 30, 472²). Heating I with barbituric acid in EtOH in the presence of pyridine yielded a yellow-green $RCH:C.CO.NH.CO.NH.CO$, decomp. 184° (from EtOH), sol. in acids or bases.                     G. M. Kosolapoff

MASLENNIKOVA, V. A.

Dissertation for the degree of Cand. Chem. Sci., Central Asia State U.

"Synthesis Based on Narcotine," Apt. Delo, 2, No.2, p. 75, 1953

Condensations of cotarnine with comods which contain a methyline group activated by two adjacent carbonyl groups were carried out. The reactions with malonic, acetonedicarboxylic, acetoacetic, and barbituric acids were studied. As a result some hitherto unknown derivs of cotarnine were obtained. A number of these derivs are being subjecyed to pharmacol investigation. If the group adjacent to the methylene is a carboxyl, this group is eliminated during the reaction.

257T6

ABUBAKIROV, N.K.; MASLENNIKOVA, V.A.; GOROVITS, M.B.

New glycoside from jute seeds. Dokl. AN Uz. SSR no.6:23-27 '57.
(MIRA 11:5)

1. Institut khimii rastitel'nykh veshchestv i khlopka AN UzSSR.
Predstavleno akademikom AN UzSSR S.Yu. Yunusovym.
(Cardiac glycosides)    (Jute)

AUTHORS:        Abubakirov, N. K.,                       SOV/79-28-8-60/66
                Maslennikova, V. A., Gorovits, M. B.

TITLE:          Investigations on Jute Glucoside (Issledovaniye
                glyukozidov dzhuta)
                I. Olitoriside (I. Olitorizid)

PERIODICAL:     Zhurnal obshchey khimii, 1958, Vol. 28, Nr 8,
                pp. 2279-2283 (USSR)

ABSTRACT:       The authors investigated the seeds of the long-fruit type of
                jute (Corchorus olitorina L.), which has recently been
                cultivated in Central Asia. An infusion of the seeds into 70%
                alcohol indicated a rather high cardiotonic activity. The
                method of separating out the glucoside is described in the
                experimental section. Special care was taken to maintain the
                temperature below 40-45° in all operations, including
                separation from the solvent. The action of acids and basic
                reagents was prevented. Care was taken, contrary to the
                methods of other investigators (Refs 2, 3, 5, 8, 9), to
                remove the excess lead ions along with hydrogen sulfide, a
Card 1/3        very important step, since the jute glucoside hydrolyses in

Investigations on Jute Glucoside.                    SOV/79-28-8-60/66
I. Olitoriside

even weakly acidic media. The separated product shows all the
reactions which are characteristic of the heart glucosides of
the digitalis-strophanthine group. The elementary analysis
(the molecular weight) and the basic titration led to the
formula $C_{35}H_{52}O_{14}$. Methoxy groups were not found to be present.
The ultraviolet absorption spectrum is characterized by two
maxima at 218 and 304 m $\mu$ (Fig 1). The presence of many
oxygen atoms permitted the product to be included in the
diglucosides. Since its physico-chemical properties are
markedly different from other known glucosides it was given the
name "olitoriside". Olitoriside is one of the most toxic of
all the glucosides. It is a bioside and hydrolyses in acid to
sugar residue and strophanthidine. New data were obtained
which showed that corchorin (Korkhorin) and strophanthidine
are identical. There are 2 figures and 13 references, 1 of
which is Soviet.

ASSOCIATION: Institut khimii rastitel'nykh veshchestv Akademii nauk
           Uzbekskoy SSR (Institute for the Chemistry of Plant Materials,
Card 2/3     AS  Uzbek    . SSR)

Investigations on Jute Glucoside.                    SOV/79-28-8-60/66
I. Olitoriside

SUBMITTED:     June 19, 1957

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5(3)

SOV/79-29-4-44/77

AUTHORS:     Abubakirov, N. K., Maslennikova, V. A., Gorovits, M. B.

TITLE:       Investigation of the Jute Glucosides (Issledovaniye glyukozidov dzhuta). II. Structure of Olitoriside (II. Stroyeniye olitorizida)

PERIODICAL:  Zhurnal obshchey khimii, 1959, Vol 29, Nr 4, pp 1235-1240 (USSR)

ABSTRACT:    Olitoriside was prepared by the authors from the seed of the plant Corchorus olitorius L. ($C_{35}H_{52}O_{14}$). They showed that it is a diglucoside and is decomposed by acids into the sugar residue and strophanthidin (Ref 1). In the article under review the data permitting the determination of its structure are given. The problem consisted in the interpretation of the nature and the order of affiliation of the two sugar residues in the strophan-thidin molecule. For this purpose olitoriside was treated with different enzymes: with emulsin,  the ferment produced from jute seed, and the ferment solution obtained from alfalfa seed. It was with the two latter ferments only that it proved possible to obtain the glucoside with the empirical formula $C_{29}H_{42}O_9$ (the name given to it is desglucoolitoriside). In contrast with

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Investigation of the Jute Glucosides. II. Structure of Olitoriside

olitoroside (I,R=H) this glucoside (III,R=H) exhibits the Keller-Kiliani reaction. With acetic anhydride (III) forms a di-acetyl derivative (IV,R=COCH$_3$). By a slightly acid hydrolysis of (III) (VI) $C_{23}H_{32}O_6$ and the 2-desoxymethylpentose (V) are formed. Of 8 isomeric 2-desoxymethylpentoses the d-boivinose (VII) (Ref 2) is closest to the constants of the sugar obtained. It was proved by synthesis (Ref 3) that (VII) is a d-xylo-2-des-oxyhexamethylose. The results of further investigations may be summarized as follows: During the fermentation hydrolysis of the vegetable diglucoside olitoriside $C_{35}H_{52}O_{14}$ d-glucose splits off from it forming the desgluco-olitoriside $C_{29}H_{42}O_9$, which, in turn, results in d-boivinose and strophanthidin due to a slight-ly acid hydrolysis. A comparison of optical molecular rotations shows that in both cases the sugar compounds exhibit the β-glu-coside bond. By the reactions mentioned the structure of olitoriside was identified as strophanthidin-(3)-β-d-boivinoside-β-d-glucoside. The scheme given illustrates the hydrolytic splitting of olitoriside. There are 1 figure, 2 tables, and

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Investigation of the Jute Glucosides. II. Structure of Olitoriside   SOV/79-29-4-44/77

8 references, 2 of which are Soviet.

ASSOCIATION:   Institut khimii rastitel'nykh veshchestv Akademii nauk Uzbekskoy
SSR (Institute of the Chemistry of Vegetable Substances of the
Academy of Sciences, Uzbekskaya SSR)

SUBMITTED:   March 18, 1958

Card 3/3

5(3)

AUTHORS:     Maslennikova, V. A., Khristulas, F. S.,   SOV/20-124-4-26/67
             Aoubakirov, N. K.

TITLE:       Structure of  Erysimoside - a Stereoid Diglucoside From Plants
             of the Genus Erysimum (Stroyeniye erizimozida-steroidnogo
             diglyukozida iz rasteniy roda Erysimum)

PERIODICAL:  Doklady Akademii nauk SSSR, 1959, Vol 124, Nr 4, pp 822-825
             (USSR)

ABSTRACT:    The species of the genus Erysimum have been investigated already
             recently as to the content of glucosides. The most favorable
             results were obtained by pharmacolcgical studies, whereby
             several Erysimum species were detected, the extracts of which
             possess the activity of cardiac glucosides (Refs 1-4). The
             chemical study of the respective active substances had been
             neglected and has been begun not before long. The authors
             give a survey of publications (Refs 5-10) on the three lacton-
             like substances which apparently are glucoside aglucones:
             erysimin, helveticoside and erysimotoxin (all of them
             monoglucosides). The above-mentioned glucosides investigated
             here were obtained from Central Asiatic plants: E. diffusum,
Card 1/4     E. gypsaceum, E. Marschallianum, E. repandum, E. violascens

Structure of Erysimoside - a Stereoid Diglucoside    SOV/20-124-4-26/67
From Plants of the Genus Erysimum

and E. vitellinum. In this paper the authors give primarily
results of the substances obtained from the seeds of
E. diffusum. Two procedures of extraction were tested: a)
by a prevented hydrolytic splitting of glucosides by specific
ferments of the plant and b) by this fermentation. The
qualitative composition of glucosides was investigated by
paper chromatography at various stages of the work. a) After
a complicated separation into several stages a substance was
isolated that is similar to olitoriside with respect to the
advance which showed one stain on the chromatogram. This new
glucoside was called "erysimoside" (I) ($C_{35}H_{52}O_{14}$). It is an
amorphous powder with specific rotation, readily soluble in
methyl and ethyl alcohol, to a sufficient extent in water,
difficult to solve in chloroform and insoluble in ether.
Erysimoside gives all color reactions characteristic of cardiac
glucosides of the Digitalis-Strophanthus group as well as the
reaction according to Liebermann that is typical of stereoids.
Its structure is determined by gradual hydrolysis. On the
influence of the pancreatic juice of the snail Helix plectotropis

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Structure of Erysimoside - a Stereoid Diglucoside     SOV/20-124-4-26/67
From Plants of the Genus Erysimum

or the ferment solution from the seeds of E. diffusum
erysimoside separates a glucose molecule and is converted
into a monoglucoside. The separated sugar turned out to be a
D-glucose (V). The portion of the molecule deprived of the
glucose - desglucoerysimoside (III) - is crystallized from
methanol in the form of colorless long needles $(C_{29}H_{42}O_9)$

with an unstable melting point. It is readily soluble in
methanol, ethanol and chloroform, difficult to solve in cold
and warm water and virtually insoluble in ether and benzene.
A second sugar molecule was separated from desglucoerysimoside
by mild acid hydrolysis. This aglucone (VI) was identified to
be a strophanthidin. By comparing the molecular rotations it
was found according to Klyne's rule (Ref 13) that the sugar
kinds are connected to each other at both points by a
$\beta$-glucoside bond. Thus, erysimoside represents a
strophanthidin-(3)-$\beta$- D-digitoxoside-$\beta$ - D -glucoside
(structural formula I). Erysimoside and olitoriside (Ref 11)
are diastereoisomeric compounds. As far as desglucoerysimoside
and the previously described helveticoside (Ref 9) and

Card 3/4

Structure of Erysimoside - a Stereoid Diglucoside        SOV/20-124-4-26/67
From Plants of the Genus Erysimum

erysimotoxin (Ref 10) have equal chemical structures, they
can be considered to be identical, notwithstanding some
differences of physico-chemical constants. There are 13
references, 10 of which are Soviet.

ASSOCIATION:    Institut khimii rastitel'nykh veshchestv Akademii nauk
UzSSR (Institute of the Chemistry of Vegetable Substances of
the Academy of Sciences, Uzbekskaya SSR)

PRESENTED:     October 2, 1958, by M. M. Shemyakin, Academician

SUBMITTED:     September 30, 1958

Card 4/4

MASLENNIKOVA, V.A.; KHRISTULAS, F.S.; ABUBAKIROV, N.K.

Glucosides in the plants of the genus Erysimum. Part 1: Glucosides in Erysimum diffusum. Zhur.ob.khim. 31 no.6:2069-2076 Je '61.
(MIRA 14:6)

1. Institut khimii rastitel'nykh veshchestv AN Uzbekskoy SSR.
(Glycosides)

ISSI, I.V.; MASLENNIKOVA, V.A.

Effect of microsporidiosis on the diapause and survival of the
ichneumon fly Spanteles glomeratus L. (Hymenoptera, Braconidae)
and the cabbage butterfly Pieris brassicae L. (Lepidoptera,
Pieridae). Ent. obez. 43 ro.1:112-117 '64       (MIRA 17:6)

1. Laboratoriya entomologii Biologicheskogo instituta Leningrad-
skogo gosudarstvennogo universiteta Staryy Petergof, Leningrad-
skoy oblasti i Laboratoriya mikrobiometoda Vsesoyuznogo instituta
zashchity rasteniy, Leningrad.

79-28-3-50/61

AUTHORS:        Sultanov, A. S., Abidova, M. F., Maslennikova, V. A.

TITLE:          The Contact Reduction of Benzaldehyde (Kontaktnoye vosstanov-
                leniye benzal'degida)

PERIODICAL:     Zhurnal Obshchey Khimii, 1958, Vol. 28, Nr 3, pp. 787-791
                (USSR)

ABSTRACT:       The present work investigates the many times used reduction
                reaction by Devard in the reduction of benzaldehyde above
                copper-zinc-aluminum catalysts. The results of this can be seen
                from table 1. They show that the best results in the reduction
                of benzaldehyde to toluene above the above mentioned cata-
                lyst can be obtained at within 200-300° C. This reduction
                mechanism under the action of different catalysts is little
                investigated. According to Ipat'yev this reduction should
                take place above iron catalysts through benzylalcohol. Thanks
                to the fact that this reduction also takes place by means of
                other contact media at relatively high temperatures the hydr-
                oxyl groups of the intermediary alcohols can be substituted
                by hydrogen atoms. As the present reduction of benzaldehyde
Card 1/3        takes place at rather low temperatures (150-300°) and as the

The Contact Reduction of Benzaldehyde                    79-28-3-50/61

catalyst used contains metallic zinc, the reaction above the
Cu-Zn-Al-catalyst could be compared to that by Clemens. The
experiments carried out ruled out ...... the carbonylmechanism
of the reduction of benzaldehyde by Clemens, especially
in its reduction to toluene. Therefore it can be assumed that
the reduction of the aldehyde group to the methyl group takes
place directly and not through the alcohol. The reduction of
benzaldehyde and benzylalcohol to toluene on the fused Cu-Zn-
-Al-catalyst can also be obtained in the diffusing system at
usual pressure. In the absence of hydrogen the benzyl- and
furfuralcohol can be dehydrogenized at the expense of the
hydrogen separated during reaction to the corresponding al-
dehydes forming at the same time toluene and sylvane. Thus
the reduction of benzaldehyde takes place directly and with-
out the formation of benzylalcohols on the above conditions.
The alcohol formed in it is a product of the process proceed-
ing parallel to the hydrogenation at temperatures below the
optimum reduction temperatures. There are 3 tables and 23 re-
ferences, 4 of which are Soviet.

ASSOCIATION:    Institut khimii Akademii nauk Uzbekskoy SSR (Chemical In-
Card 2/3        stitute,AS Uzbek SSR)

5(3)                                                    SOV/80-32-3-22/43

AUTHORS:         Sultanov, A.S., Maslennikova, V.A.

TITLE:           Contact Reduction of Furfurole to Sylvan (Kontaktnoye vossta-
                 novleniye furfurola v sil'van)

PERIODICAL:      Zhurnal prikladnoy khimii, 1959, Vol XXXII, Nr 3, pp 595-599
                 (USSR)

ABSTRACT:        Furfurole may be reduced to sylvan by means of a zinc catalyst
                 like that used in the transformation of aldehydes to hydro-
                 carbons. Hydrogen which is formed in the interaction of zinc
                 with hydrochloric acid reduces the carbonyl compounds. In the
                 reduction of furfurole zinc is used in combination with copper
                 which transfers the hydrogen to zinc in an active form. In
                 order to keep the copper-zinc alloy in an active condition, a
                 zinc-copper-aluminum alloy is employed in which the aluminum is
                 dissolved by alkali leaving the other two components in an active
                 state. The most efficient ratio of the Zn-Cu-Al alloy is 17:33:50.
                 This catalyst ensures a 97%-transformation of furfurole to sylvan
                 at normal pressure and a temperature of 285-290°C. The most
Card 1/2         economic ratio of furfurole to hydrogen is 1:5.

Contact Reduction of Furfurole to Sylvan                    SOV/80-32-3-22/43

There are 2 tables and 26 references, 4 of which are Soviet,
11 English, 7 American, 2 German and 2 French.

ASSOCIATION:  Institut khimii Akademii nauk UzSSR (Institute of Chemistry of
the AS Uzbek SSR)

SUBMITTED:   February 14, 1958

Card 2/2

MASLENNIKOVA, V.A.; ABUBAKIROV, N.K.

Study of glycosides from the plants of the genus Eyrsimum. Part 3:
Reduction of erysimozide to erysimosol. Zhur.ob.khim. 33 no.6:
2056-2058 Je '63.
(MIRA 16:7)

1. Institut khimii rastitel'nykh veshchestv AN Uzbekskoy SSR.
(Glycosides) (Erysimum)

SUDAKOVA, I.M. (Tashkent); MASLENNIKOVA, V.F. (Tashkent);
DERGUNOV, I.D. (Tashkent)

Effect of nitrogen fertilizers on the accumulation and
injuriousness of Aphelenchoides besseyi Christie, 1942, the
causative agent of the "white apex" of rice. Zool. zhur. 43
no.11:1708-1710  '64.                        (MIRA 18:11)

MASLENNIKOVA, V.F.

Faunal dynamics of rice nematodes in Tashkent and Fergana
Provinces, Uzbek S.S.R. Trudy Gel'm. lab. 16:68-74 '65.

(MIRA 19:2)

USSR / Cultivated Plants. Plants for Technical Use.    M-6
          Sugar Plants.

Abs Jour: Ref Zhur-Biol., 1958, No 16, 73064.

Author  : Maslennikova, V. I.
Inst    : Not given.
Title   : Experimental Work with Oil-Bearing Crops in
          Chelyabinskaya Oblast.

Orig Pub: V sb.: Maslichn. kul'tury v vost. r-nakh SSR, Kras-
          nodar, "Sov.Kuban'", 1956, 77-89.

Abstract: No abstract.

Card 1/1                     104

MASLENNIKOVA, V.M.

USSR/Human and Animal Physiology - Nervous System.                V-12

Abs Jour    :  Ref Zhur - Biol., No 1, 1958, 4471

Author      :  V.M. Maslennikova

Inst        :  Institute of the Higher Nervous Activity, Academy of
               Sciences USSR

Title       :  Influence of External Inhibition on the Joint Activity
               of the First and Secind Signalling Systems.

Orig Pub    :  Tr. In-ta vyssh. nervm. deyatel'nosti, AN SSSR, ser.
               patofiziol. 1956, 2, 46-56

Abstract    :  The effects of external inhibition (EI) were tested in
               42 children.  It was found that it led to the prolonga-
               tion of the latent period and a change of the strength
               of the reaction, or an absence of the latter.  Verbal
               response was adequate before the application of EI,
               while it became frequently inadequate after it:

Card 1/2

MASLENNIKOVA, V. N.

   "Cauchy's Problem and the Mixed Problem for One System of Equations in Partial Derivatives." Cand Phys-Math Sci, Mathematics Inst imeni V. A. Steklov, Acad Sci USSR, Moscow, 1954.   (KL, No 5, Jan 55)

   Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

*Maslennikova, V. N.*

USSR/ Mathematics - Cauchy problem

Card   1/1       Pub. 22 - 7/53

Authors    :   Maslennikova, V. N.

Title      :   Construction of the solution of the Cauchy problem for a system of
               equations with partial derivatives

Periodical :   Dok. AN SSSR 102/4, 685-688, Jun 1, 1955

Abstract   :   A solution of the Cauchy problem for a system of partial differential
               equations expressing a certain relationship among the x, y and z variables
               in an infinite space is presented.  The application of the Green Theorem
               helped to get the solution in an explicit form.  Two USSR references
               (1938-1954).

Institution :   The Acad. of Sc., USSR, V. A. Steklov Mathematical Institute

Presented by :   .....

MASLENIKOVA, V.N.

SUBJECT      USSR/MATHEMATICS/Differential equations        CARD 1/1    PG - 125
AUTHOR       MASLENNIKOVA W.N.
TITLE        On mixed problems for a set of equations of mathematical physics.
PERIODICAL   Doklady Akad. Nauk 102, 885-888 (1955)
             reviewed 7/1956

The author considers the set of equations (1) and the equation (2) considered
in the preceding paper (Doklady Akad. Nauk 102, 685-688 (1955)) for the
case $\alpha=1$. (1) is considered in the domain $\Omega$ of the variables x,y,z which
is limited by a smooth surface S, for $\infty > t \geqslant 0$. It is shown that the mixed
problem can be formulated for the two equations (1) and (2). (1) has a
solution which satisfies the initial conditions $\vec{v}|_{t=0} = \vec{v}^0(x,y,z)$ ;

$p|_{t=0} = p^0(x,y,z)$ and one of the boundary conditions $p_s = 0$ or $\vec{v}_n|_s = 0$

($\vec{v}_n$ is the projection of the vector $\vec{v}$ with the components $v_x, v_y, v_z$ on the
internal normal of S). (2) possesses a solution which satisfies the initial
conditions $\dfrac{\partial^k p}{\partial t^k}\Big|_{t=0} = 0$ and one of the boundary conditions $p|_s = 0$ or

$L_1 p\Big|_s \equiv \left[\dfrac{\partial p}{\partial z}\cos nz + \dfrac{\partial^3 p}{\partial t^2 \partial n} - \dfrac{\partial^2 p}{\partial x \partial t}\cos ny + \dfrac{\partial^2 p}{\partial y \partial t}\cos ny\right]_s = 0.$

INSTITUTION: Math.Inst. of Steklov. Academy of Sciences USSR.

*MASLENNIKOVA*

SUBJECT      USSR/MATHEMATICS/Differential equations    CARD 1/1   PG - 795
AUTHOR       MASLENNIKOVA V.N.
TITLE        The solution of the mixed problem for the instationary motion
             of a rotating tenacious fluid and the investigation of the
             differential properties of this solution.
PERIODICAL   Doklady Akad.Nauk 109, 697-700 (1956)
             reviewed 5/1957

The author proves the existence and uniqueness of the generalized solution

of the system $\frac{\partial \vec{v}}{\partial t} - [\vec{v} \times \vec{\omega}] - \mu \Delta \vec{v} + \text{grad } p - \vec{F}(x,t)$,   div $\vec{v} = 0$ with the

conditions $\vec{v}(x,t)\big|_{t=0} = 0$,   $\vec{v}(x,t)\big|_{s} = 0$ for $t \in [0,e]$ in the cylindrical

space $Q = \Omega \times (0 \leqslant t \leqslant e)$, where $\Omega$ is a region of the $R_3$ with the boundary S.
The proof is given for a certain class of functions. The conditions of
differentiability of the solution are investigated.


INSTITUTION: Math.Inst.Acad.Sci.USSR.

*MASLENNIKOVA, V·N·*

AUTHOR:       Maslennikova,V.N.                          38-22-1-6/6

TITLE:        Explicit Solution of Cauchy's Problem for a Partial System
              of Equations (Resheniye v yavnom vide zadachi Koshi dlya od-
              noy sistemy uravneniy s chastnymi proizvodnymi)

PERIODICAL:   Izvestiya Akademii Nauk SSSR,Seriya Matematicheskaya,1958,Vol.22,
                                        Nr 1, pp 135-160 (USSR)

ABSTRACT:     In a domain $\Omega(x,y,z)$ limited by the surface  S  the author
              considers for  $0 \leqslant t < \infty$  the system

$$(1) \quad \frac{\partial v_x}{\partial t} - v_y + \frac{\partial p}{\partial x} = F_x \qquad \frac{\partial v_z}{\partial t} + \frac{\partial p}{\partial z} = F_z$$

$$\frac{\partial v_y}{\partial t} + v_x + \frac{\partial p}{\partial y} = F_y \qquad \alpha^2 \frac{\partial p}{\partial t} + \operatorname{div} \vec{v} = 0$$

By elimination of the unknown functions one obtains

$$(2) \quad Lp \equiv \frac{\partial^2 \Delta p}{\partial t^2} + \frac{\partial^2 p}{\partial z^2} - \alpha^2 \left( \frac{\partial^4 p}{\partial t^4} + \frac{\partial^2 p}{\partial t^2} \right) = f \quad ,$$

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an equation which is satisfied by each single unknown func-
tion, here $\Delta$ is the Laplace operator. Cauchy's problem
$\vec{v}\big|_{t=0} = \vec{v}_o$ , $p\big|_{t=0} = p^o$) for (1) is set up. The solution is
carried out by considering the characteristics, the charac-
teristic cone and by the particular solutions of (2) for
$f \equiv 0$, several of which are given, e.g.:

$$\phi = \frac{1}{r} J_o \left(\frac{\rho \sqrt{\tau^2 - \alpha^2 r^2}}{r}\right) \ , \ \rho^2 = (x-x_o)^2 + (y-y_o)^2, \ r^2 = \rho^2 + (z-z_o)^2 \ ,$$

$\tau = t - t_o$. Now it it proved that the general solution of the
homogeneous system (1) is given by the formulas

$$(3) \ \vec{v} = \text{grad}\ \frac{\partial^2 \phi}{\partial t^2} + (\text{grad}\ \frac{\partial \phi}{\partial t} \times \vec{K}) + \vec{K}\ (\text{grad}\ \phi, \vec{K}) \ ;$$

$$p = - \frac{\partial^3 \phi}{\partial t^3} - \frac{\partial \phi}{\partial t} \quad \text{where } \phi \text{ is the solution of}$$

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$$\frac{\partial^2}{\partial t^2} \Delta \phi + \frac{\partial^2 \phi}{\partial z^2} = 0 \quad \text{and } \vec{K} \text{ is the unit vector in direction of}$$

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the z-axis. According to formula (3) now four particular in-
tegrals of the homogeneous system (1) are constructed from cer-
tain combinations of the particular integrals of (2) mentioned
above. With the aid of these four integrals then the solution
of Cauchy's problem can be explicitly given with the aid of
Bessel functions. In the last (sixth) paragraph of the paper
the qualitative results are shortly summarized which can be
concluded from the obtained solution. There are 5 references,
4 of which are Soviet, and 1 English.

PRESENTED:    by S.L.Sobolev, Academician

SUBMITTED:    October 24, 1955

AVAILABLE:    Library of Congress

1. Equations-Solution    2. Cauchy's equations-Applications

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USCOMM-DC-55,048

AUTHOR:     Maslennikova, V.N.                          38-22-2-6/8
TITLE:      Mixed Problems for a Partial System of Equations of First
            Order (Smeshannyye zadachi dlya odnoy sistemy uravneniy s
            chastnymi proizvodnymi pervogo poryadka)

ABSTRACT:   Two mixed problems are considered for the system

$$\frac{\partial \vec{v}}{\partial t} - \left[ \vec{v} \times \vec{k} \right] + \operatorname{grad} p = \vec{F}$$

$$\frac{\partial p}{\partial t} + \operatorname{div} \vec{v} = \psi$$

The paper contains explicit proofs for the announcement of
the results [Ref 5] already given 3 years ago. There are
7 references, 6 of which are Soviet, and 1 English.

PRESENTED:  by S.L. Sobolev, Academician
SUBMITTED:  October 24, 1955
AVAILABLE:  Library of Congress
Card 1/1

1. Partial Differential equations   3. Analytic functions
—Theory

AUTHOR:          Maslennikova, V. N.                                    3o-1-24/39

TITLE:           Annual Meeting of the German Mathematics  Society
                 (Godichnoye sobraniye Germanskoy matematicheskoy
                 assotsiatsii)

PERIODICAL:      Vestnik AN SSSR, 1958, Vol. 28, Nr 1, pp. 1o6-1o7 (USSR)

ABSTRACT:        This meeting took place in Dresden from September 8 - 14,
                 1957. Besides the mathematicians of the German Democratic
                 Republic and the German Federal Republic also guests from
                 England, Bulgaria, Hungary, China, Poland, Roumania, USSR
                 and from Czechoslovakia took part. The Soviet delegation
                 consisted of P. S. Aleksandrov, P. S.Novikov, A. V.
                 Bitsadze, V. M. Glushkov and V. N. Maslennikova. The
                 program of the meeting was carried out in three groups as
                 well as in general meetings. In one group the problems of
                 mathematical analysis and of differential equations was
                 discussed, in the two other groups various fields of
                 mathematics were discussed. Among other matters, E.
                 Helder (Leipzig) reported on systems of differential
                 equations. Professor Vu (China), K. Borsak (Poland) and
Card 1/2         P. Aleksandrov (USSR) reported on certain problems of

Annual Meeting of the German Mathematical Society          30-1-2/39

        algebraic. topology. P. S. Novikov reported on the
        solution of an important problem of mathematical logic.

AVAILABLE:    Library of Congress
        1. Mathematics-Germany

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*16,3500*

AUTHORS: Kamynin,L.I., and Maslennikova,V.N.

TITLE: Certain Properties of Solutions of Mixed Problems for a
Parabolic Equation With Discontinuous Coefficients

PERIODICAL: Doklady Akademii nauk SSSR, 1960,Vol.133,No.5,pp.1003-1006.

TEXT: In $Q = \Omega \times (0,T)$, where $\Omega$ is a domain of the $x = (x_1, \ldots, x_n)$, the authors consider the parabolic equation

$$(1) \quad Lu \equiv \sum_{i,j=1}^{n} a_{ij}(x,t) \frac{\partial^2 u}{\partial x_i \partial x_j} + \sum_{i=1}^{n} b_i(x,t) \frac{\partial u}{\partial x_i} + c(x,t)u - \frac{\partial u}{\partial t} = 0.$$

The coefficients are sufficiently smooth, but in the points of finitely many n-dimensional cylindric manifolds $\Gamma_k = S_k \times (0,T)$ they may have discontinuities of first kind. $\Omega$ is bounded by a closed surface S. The $\Gamma_k$ decompose Q into domains $Q_k = \Omega_k \times (0,T)$. Let the boundaries of $Q_k$ and $Q_l$ (resp. $\Omega_k$ and $\Omega_l$) not coinciding with $\Gamma = S \times (0,T)$ be $\Gamma_{kl}$ (resp. $S_{kl}$). Let two $\Gamma_{kl}$ be disjoint $\Gamma_{kl} \cap \Gamma = 0$. Let $a_{ij}^{(k)}$, $a_{ij}^{(l)}$ etc. be the limit values of $a_{ij}$ etc. on both sides of $\Gamma_{kl}$. $\Gamma$ and $\Gamma_{kl}$

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belong to the Lyapunov class. The authors investigate the properties
of the solution $u(x,t)$ of

(2)      $Lu = f(x,t), \quad (x,t) \in Q_k$

continuous in $\bar{Q}$ , with the conditions

(3)    $l(u) \equiv \alpha(x,t) \dfrac{\partial u}{\partial N} + b(x,t)u \big|_{\Gamma} = \varphi(x,t)$

(4)    $u(x,0) = F(x); \quad x \in \bar{\Omega}$

(5)    $\alpha_k(x,t) \dfrac{\partial u}{\partial N_k} + \alpha_1(x,t) \dfrac{\partial u}{\partial N_1} \Big|_{\Gamma_{kl}} = h_{kl}(x,t)$

(6)    $u(x,t) \Big|_{\Gamma_{kl}^{-0}} = u(x,t) \Big|_{\Gamma_{kl}^{+0}}$ ,

where

(7)     $a(x,0) \dfrac{\partial F(x)}{\partial N} + b(x,0)F(x) = \varphi(x,0).$

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Here $\frac{\partial N}{\partial N_k} = \sum_{i,j=1}^{n} a_{ij}^{(k)} \cos(n_k, x_l) \frac{\partial}{\partial x_j}$ is the derivative with respect

to the conormal $N_k$, where $n_k$ is the inner normal of $\Gamma_{kl}$ with respect to

$Q_k$; $\partial/\partial N$ is the derivative with respect to the conormal of $\Gamma$.

Furthermore it holds

(8)  $\alpha_k(x,t) \geqslant \alpha > 0$ for $(x,t) \in \Gamma_k$

and

(9)   $a(x,t) \geqslant 0$,  $b(x,t) \leqslant 0$, $a^2(x,t) + b^2(x,t) > 0$ for $(x,t) \in \Gamma$.

Theorem 1: If $u(x,t)$ is a solution of (1) continuous in $\bar{Q}$ which
satisfies the conditions (5),(6) and

(17)       $l(u)|_\Gamma = 0$;

(18)      $u(x,0) = 0$
and which has the derivatives $\partial u/\partial N$ on $\Gamma$, $\partial u/\partial N_k$, $\partial u/\partial N_l$ on $\Gamma_{kl}$,

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where $\Gamma$ and $\Gamma_{kl}$ are so smooth that the lemma 1 exists, then everywhere
in $\overline{Q}$ it holds

$$(19) \quad |u(x,t)| \leq \frac{A}{r\alpha} \max_{k,l} \max_{(x,t)\in\Gamma_{kl}} |h_{kl}(x,t)|,$$

where $A, r, \alpha$ are constants of (Ref.8,15,16).

[Abstractors note: Lemma 1 is valid if the conditions of the existence
theorems of T.D.Ventsel' (Ref.5) and A.Fridman (Ref.7) are satisfied.
The A and r defined by (15) and (16) are least upper bounds of the
solution resp. its derivative, of a mixed auxiliary problem appearing
in lemma 1].
Theorem 2: If the coefficients of (2) and $\Gamma$, $\Gamma_k$ satisfy the conditions
under which lemma 1 is valid, and if $f(x,t)$, $F(x)$, $\partial F(x)/\partial x_i$,

$\varphi(x,t)$ and $h_{kl}(x,t)$ in (2)-(6) are continuous in their domains of

definition $\overline{Q}, \overline{\Omega}$, $\Gamma$ and $\Gamma_{kl}$, where (7)-(9) is satisfied, then (2)-(6)
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has not more than one solution $u(x,t)$ continuous in $\bar{Q}$, two times
continuously differentiable in $Q_k$ and having derivatives with respect
to the inner conormals to $\Gamma$ and $\Gamma_k$.

Theorem 3: Let $u(x,y)$ in $\bar{Q}$ be a continuous solution of (2),(17),(18),
(5) and (6). If

(20)               $c(x_i t) < 0$,
then everywhere in $Q$ it holds:

$$|u(x,t)| \leq \frac{\max\limits_{(x,t)\in\bar{Q}} |f(x,t)|}{\min\limits_{(x,t)\in\bar{Q}} |c(x,t)|} + \frac{A}{r\alpha} \max_k \max_{(x,t)\in\Gamma_k} |h_k^-(x,t)| \equiv B(f,h),$$

where $A, r, \alpha$ are the same as above.
Theorem 4: Let for arbitrary $\psi_1(x,t)$, $\psi_2(x,t)$ of $C^k(\bar{Q})$ $(k \geq 0)$ exist a
solution of (1) continuous in $\bar{Q}$ $(c(x,t)$ satisfies (20)), which satisfies
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Certain Properties of Solutions of Mixed Problems for a Parabolic
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the conditions (5) for $h_k(x,t) \equiv 0$ and $l(u)|_\Gamma = \Psi_1(x,t)$, $u(x,0) = \Psi_2(x)$.
If $a(x,t)$, $b(x,t)$ satisfy the condition (9) and if they belong to the
same class $C^{(k)}(\Gamma)$, then the solution $u(x,t)$ of (2),(3),(5),(6),(18)
which is continuous in $\bar{Q}$, satisfies the inequation

$$|u(x,t)| \le B(\beta,h) + K_1 \frac{\max_{(x,t)\in\Gamma} |\varphi(x,t)|}{\min_{(x,t)\in\Gamma}(|a(x,t)|+|b(x,t)|)} \times$$

(24)

$$X \left\{ 1 + K_2 \left[ \frac{2A}{r+a} \sum_{j,k=1}^{n} \max_{(x,t)\in\bar{Q}} |a_{ij}(x,t)| \cdot \max_{(x,t)\in\Gamma_k} |\alpha_k(x,t)| + \right. \right.$$

$$\left. \left. + \frac{\max_{(x,t)\in\bar{Q}} \left(\sum_{i,j=1}^{m} |a_{ij}| + \sum_{i=1}^{n} |b_i| + 1\right)}{\min_{(x,t)\in\bar{Q}} |c(x,t)|} \right] \right\} \equiv M(\beta,\varphi,h),$$

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where $K_1, K_2$ do not depend on the coefficients of the equation and f,
$\varphi$, $h_k$.

Theorem 5: If $u(x,t)$ is in $\overline{Q}$ a continuous solution of (1) with the
homogeneous conditions (17) and (5) ($h_k \neq 0$) and (4), where F(x) is
continuous in $\Omega$, and if (7) ($\varphi \neq 0$) is satisfied, then everywhere in
Q it holds

$$ |u(x,t)| \leqslant \max_{x \in \Omega} |F(x)|. $$

Theorem 6 gives a similar estimation for the solution of (2)-(7).
Theorems 7 and 8 treat the continuous dependence of the solution of
(2)-(7) on the coefficients of (2) and on the boundary and initial
conditions.

The authors mention O.A.Oleynik, R.Vyborny and I.A.Shishmarev. There
are 7 references: 6 Soviet and 1 American.
ASSOCIATION: Matematicheskiy institut im V.A.Steklova Akademii nauk SSSR
    (Mathematical Institute im.V.A.Steklov AS USSR)
PRESENTED:  April 12, 1960, by S.L.Sobolev, Academician
SUBMITTED:  April 11, 1960
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S/199/61/002/003/003/005
B112/B203

AUTHORS:      Kamynin, L. I., and Maslenikova, V. N.

TITLE:        A maximum principle for parabolic equations with dis-
              continuous coefficients

PERIODICAL:   Sibirskiy matematicheskiy zhurnal, v. 2, no. 3, 1961, 384-399

TEXT:  The authors study parabolic equations with discontinuous
coefficients by O. A. Oleynik's methods.  They consider the equation

$$Lu \equiv \sum_{i,j=1}^{n} a_{ij}(x,\,t)\frac{\partial^2 u}{\partial x_i \partial x_j} + \sum_{i=1}^{n} b_i(x,\,t)\frac{\partial u}{\partial x_i} + c(x,\,t)u - \frac{\partial u}{\partial t} = 0, \quad (1)$$

$$\sum_{i,j=1}^{n} a_{ij}(x,\,t)\lambda_i\lambda_j \geqslant \varkappa \sum_{i=1}^{n} \lambda_i^2, \quad \varkappa = \text{const} > 0, \quad c(x,\,t) \leqslant 0.$$

in a domain Q which is composed of an n-dimensional domain Ω for the
x-variables and the interval (0,T) for the t-variable:  $Q = \Omega \cdot (0,T)$.  The
surface of Q is $\Gamma = S \cdot (0,T)$.  Ω is divided into a finite number of

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partial domains $Q_k = \Omega_k \cdot (0,T)$, whose surfaces $\Gamma_k = S_k \cdot (0,T)$ are discontinuity surfaces for the coefficients $a_{ij}$, $b_i$, and c. $\Gamma_{kl} = S_{kl} \cdot (0,T)$ are the boundary surfaces common to $\Gamma_k$ and $\Gamma_l$. The authors assume that $\Gamma$ and $\Gamma_{kl}$ belong to the Lyapunov surface class. They try to obtain continuous solutions for the following boundary problem:

$$Lu = f(x,t), \quad (x,t) \in Q_k, \qquad (2)$$

$$l(u) \equiv a(x,t) \frac{\partial u}{\partial N} + b(x,t)u\big|_\Gamma = \varphi(x,t), \qquad (3)$$

$$u(x,0) = F(x), \quad x \in \overline{\Omega}, \qquad (4)$$

$$l_{kl}(u) \equiv \alpha_k(x,t) \frac{\partial u}{\partial N_k} + \alpha_l(x,t) \frac{\partial u}{\partial N_l}\Big|_{\Gamma_{kl}} = h_{kl}(x,t), \qquad (5)$$

$$u\big|_{\Gamma_{kl}-0} = u\big|_{\Gamma_{kl}+0}, \qquad (6)$$

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$$a(x,0)\frac{\partial F(x)}{\partial N} + b(x,0)F(x) = \varphi(x,0); \quad x\in S, \qquad (7)$$

$$\alpha_k(x,t) \geqslant \alpha > 0 \text{ for } (x,t)\in\Gamma_k \qquad (8)$$

$$a(x,t) \geqslant 0, \; b(x,t) \leqslant 0, \; a^2(x,t) + b^2(x,t) > 0 \text{ for } (x,t)\in\Gamma. \quad (9)$$

The authors establish a condition A corresponding to the conditions of theorem 4 of the paper: Boundary estimates for second order parabolic equations and their applications (Math. and Mech. 7, N 5 (1958), 771-791) by A. Friedman. On the basis of this condition, they prove a number of theorems containing solution estimates and respective uniqueness theorems, e.g.: Theorem 1: If condition A is fulfilled, and $u(x,t)$ is a solution of Eq. (1) continuous on $\bar{Q}$, which fulfills the conditions (5,6) as well as $lu|_\Gamma = 0$, $u(x,0) = 0$, then the estimate

$$|u(x,t)| \leqslant \frac{A}{r\alpha} \max_{k,l} \max_{(x,t)\in\Gamma_{kl}} |h_{kl}(x,t)|$$

holds on $\bar{Q}$, where $A$, $r$, and $\alpha$ are certain constants. Theorem 2: If condition A is fulfilled, and the functions $f(x,t)$, $F(x)$, $\frac{\partial F(x)}{\partial x_1}$, $\varphi(x,t)$, and $h_{kl}(x,t)$ are continuous on $\bar{Q}, \bar{\Omega}$, $\Gamma$, and $\Gamma_{kl}$, and satisfy conditions

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(7-9), then the problem (2-6) has not more than one solution function
continuous on $\bar{Q}$ and continuously twice differentiable with respect to t on
$Q_k$, which has derivatives with respect to the inner conormals to the
boundary surfaces $\Gamma$ and $\Gamma_k$. There are 8 references: 6 Soviet-bloc and
2 non-Soviet-bloc. The most important reference to the English-language
publications reads as follows: Nierenberg L., A strong maximum principle
for parabolic equations, Comm. on pure and app. math. 6, N 2 (1953),
167-177.

SUBMITTED:    May 12, 1960

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MASLENNIKOVA, V.N.

Solution of a mixed problem for the nonstationary motion of a rota-
ting viscous fluid and the investigation of the differential pro-
perties of this solution. Sib. mat. zhur. 2 no.5:708-718 S-O
'61.
(MIRA 15:3)

(Fluid dynamics)